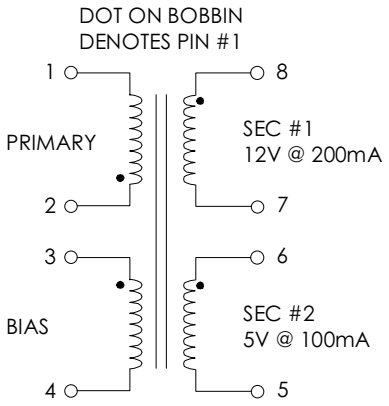
TABLE 1: ELECTRICAL SPECIFICATIONS AT 25 °C

SWITCHING TRANSFORMER DESIGNED FOR USE WITH POWER INTEGRATIONS PWR-TOP210PFI REFER TO APPLICATION CIRCUIT OF FIGURE 3

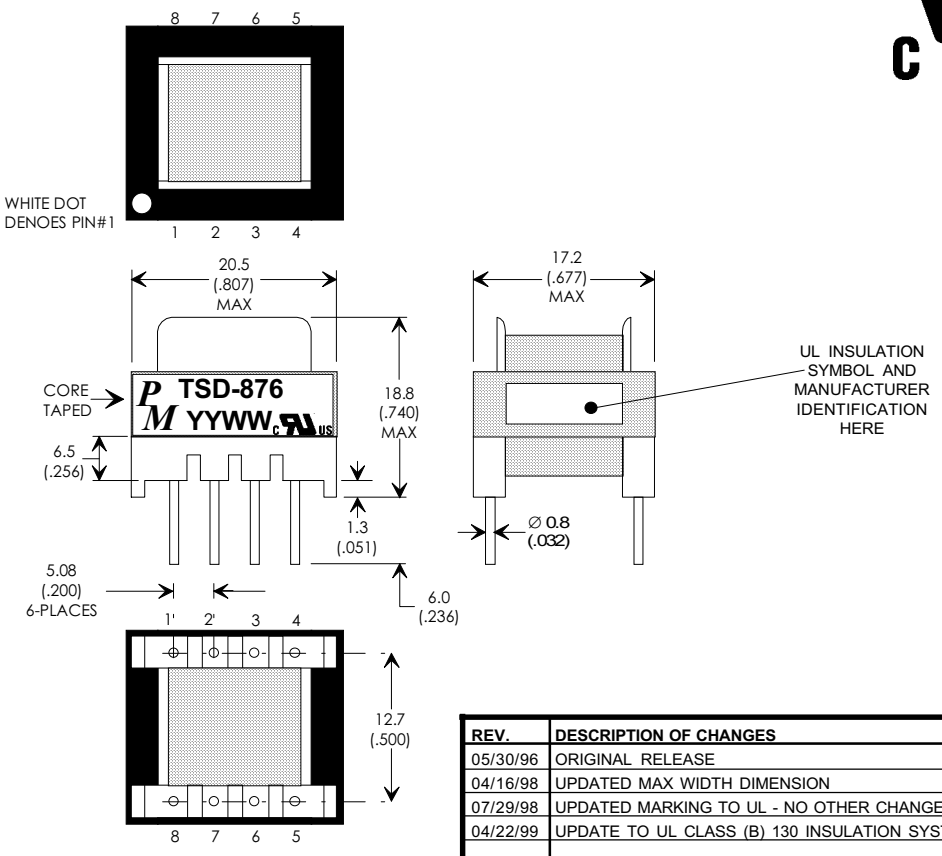
PARAMETER	SPEC LIMITS MIN.	TYP.	MAX.	UNITS
PRIMARY INDUCTANCE (2-1) VOLTAGE = 0.250Vrms FREQUENCY = 100 KHZ	5.40	6.00	6.60	mHY
TURN RATIO'S: SEC #1 (8-7) : PRIMARY (2-1) SEC #2 (6-5) : PRIMARY (2-1) BIAS (3-4) : PRIMARY (2-1)	------ ------ ------	1: 8.24 1:17.50 1: 8.24	------ ------ ------	± 3% ± 3% ± 3%
PRI LEAKAGE IND. (SEC'S SHORTED) VOLTAGE = 0.250Vrms FREQUENCY = 100 KHZ	------	130.0	150.0	µHY
HIPOT: PRIMARY TO SECONDARY'S BIAS TO SECONDARY'S	3000 3000	------ ------	------ ------	Vrms Vrms
APP CIRCUIT PARAMETERS: AC LINE VOLTAGE 47/400 Hz SEC #1 OUTPUT VOLTAGE OUTPUT CURRENT CONTINUOUS SEC #2 OUTPUT VOLTAGE OUTPUT CURRENT CONTINUOUS LINE REGULATION (85 TO 265Vac) RIPPLE	85 ------ 0.010 ------ 0.00 ------ ------	------ 12.0 ------ 5.0 ------ 0.20 50.0	265 ------ 210 ------ 110 ------ ------	Vac Vdc mA Vdc mA ±% ±mV

FIGURE 1: SCHEMATIC DIAGRAM



NOTE1:
REINFORCED INSULATION SYSTEM, UL1950, IEC950, CSA-950:
A) ALL MATERIALS MEET "UL", "CSA" & "IEC" REQUIREMENTS
B) TRIPLE BASIC INSULATED SECONDARY.
C) DESIGNED TO MEET ≥6.2mm CREEPAGE REQUIREMENTS.
D) VARNISH FINISHED ASSEMBLY.
E) UL1950 & CSA-950 CERTIFIED: FILE #E162344.
F) UL CLASS (B) 130 INSULATION SYSTEM PM130-R1, PM130-H1, PM130-H1A (UL FILE #E177139) OR ANY UL AUTHORIZED CLASS (B) INSULATION SYSTEM.

FIGURE 2: PHYSICAL DIMENSIONS mm (INCHES)



REV.	DESCRIPTION OF CHANGES	BY
05/30/96	ORIGINAL RELEASE	TO
04/16/98	UPDATED MAX WIDTH DIMENSION	AS
07/29/98	UPDATED MARKING TO UL - NO OTHER CHANGES	AS
04/22/99	UPDATE TO UL CLASS (B) 130 INSULATION SYSTEM	MD

EE19 (E187), 8-PIN HORIZONTAL

Premier Magnetics Inc.
"INNOVATORS IN MAGNETICS TECHNOLOGY"

UNLESS OTHERWISE SPECIFIED
DIMENSIONS ARE IN MM
DIMENSIONAL TOLERANCES ARE:
DECIMALS ANGLES
.X ± .25 ±0 ° 30'
.XX ± .15
DO NOT SCALE DRAWING

TRANSFORMER CONTROL DRAWING

PREMIER P/N: TSD-876	REVISION: 04/22/99
ENGR: TOM O'NEIL	REF: PWR-TOP210PFI
SCALE: NONE	SHEET: 1 OF 6

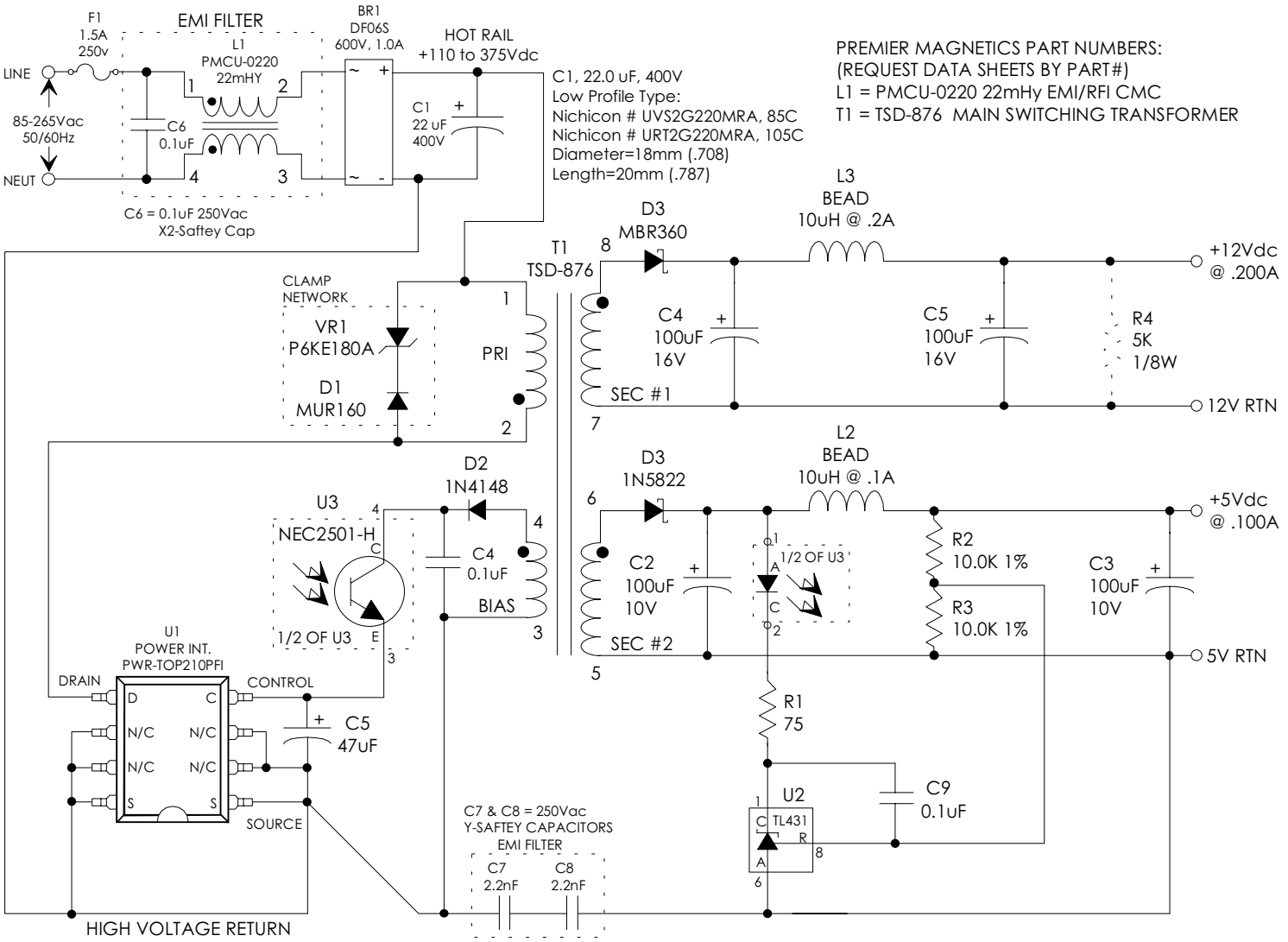
APPLICATION NOTES

Premier Magnetics' TSD-876 Switch Mode Transformer was designed for use with Power Integrations, Inc. PWR-TOP210PFI three terminal off-line PWM switching regulator in the Flyback Buck-Boost circuit configuration. This conversion topology can provide isolated multiple outputs with efficiencies up to 90%. Premiers' TSD-876 transformer has been optimized to provide maximum power throughput.

The PWR-TOPXXX series from Power Integrations, Inc. are self contained 100KHz three terminal voltage controlled PWM switching regulators. This series contains all necessary functions for an off-line switched mode control DC power source. These switching regulators provide a very simple solution to off-line designs. The inductors and transformer used with the PWR-TOPXXX are critical to the performance of the circuit. They define the overall efficiency, output power and overall physical size.

Below is a universal input high precision 3W watt application circuit utilizing Power Integrations PWR-TOP210PFI switching regulator in the flyback buck-boost configuration. If the 12V output is to be run unload a clamp resistor (R4 shown by the dotted lines) should be added to prevent possible destructive voltage runaway. The component values listed are intended for reference purposes only. The EMI/RFI capacitors C7 & C8 are shown for reference but should not be needed to meet EMI/RFI emission specifications.

FIGURE 3: TYPICAL APPLICATION CIRCUIT



Premier Magnetics Inc. "INNOVATORS IN MAGNETICS TECHNOLOGY"	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN MM DIMENSIONAL TOLERANCES ARE: DECIMALS .X ± .25 .XX ± .15 ANGLES ±0° 30' DO NOT SCALE DRAWING	**TRANSFORMER CONTROL DRAWING**
		PREMIER P/N: TSD-876 — REVISION: 04/22/99
		ENGR: TOM O'NEIL — REF: PWR-TOP210PFI
		SCALE: NONE — SHEET: 2 OF 6